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**HANFORD SITE FACILITY
DANGEROUS WASTE PERMIT
ISSUE PAPERS**

**DOE-RL/Contractor/Ecology/EPA Review Draft
Rev. 0A, March 20, 1991**

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03/14/91

Dates?
3/20/91.

HANFORD SITE FACILITY PERMIT ISSUE PAPERS

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1.0 Contingency Plan

1.1 Issue

What constitutes appropriate contingency plan documentation for the Hanford Site Facility?

1.2 Resolution

The WAC 173-303 requirements for contingency plans are satisfied in the following documents: the *Department of Energy-Richland Operations Office (DOE-RL Emergency Plan)*, the *Westinghouse Hanford Company (WHC) Emergency Plan*, the *Pacific Northwest Laboratories (PNL) Emergency Plan*, and the Building Emergency Plan for an individual waste management unit. These plans will be included in the formal submittal of the *Hanford Site Facility Permit Application* (Facility permit application) (both at the facility and waste management unit level). The DOE-RL plan will have overall control if inconsistencies between plans are noted.

Because the cited contingency plan documents also serve to satisfy a broad range of other requirements (e.g., OSHA and DOE Orders), revisions made to portions of these documents that are not governed by the requirements of WAC 173-303 will not be considered as a permit modification subject to review or approval by Ecology. Those portions of the contingency plan documents that do address the requirements of WAC 173-303 will be identified in the Facility permit application.

Position names associated with contingency or emergency responsibilities will be included in the facility permit application (both at the facility and waste management unit level). However, names of individuals filling these positions will not be provided in the permit application. These names will be maintained on file at the Hanford Site Occurrence Notification Center and will be available to the regulators by contacting that Center. X

Contingency plan information will be included in Chapter 7.0 of the Hanford Site Facility Permit application. X

2.0 Quality Assurance/Quality Control Plan

2.1 Issue

What constitutes appropriate QA/QC documentation for the Hanford Site Facility Permit?

2.2 Resolution

See attached proposal entitled *Hanford Site Facility Permit preliminary draft of the QA/QC section*.

QA/QC plan information will be included in Chapter 12.0 of the Hanford Site Facility Permit application.

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HANFORD SITE FACILITY PERMIT
PRELIMINARY DRAFT OF THE QA/QC SECTION

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2.0 QA/QC REQUIREMENTS

This section outlines the QA/QC policy and requirements that DOE-RL (permit holder) and its contractors (operators) will implement. Implementation of QA/QC programs contribute the assurance that treatment, storage, and disposal (TSD) facilities will satisfy the requirements of the permit.

2.1 POLICY

It is DOE-RL's policy that QA programs (QAP) be developed and implemented to ensure that risks and environmental impacts are minimized and that safety, reliability, and performance are maximized through the use of effective management systems.

2.2 OBJECTIVES

The objectives of the QAP are to ensure that 1) management provides planning, organization, direction, control, and support in order to achieve programmatic goals; 2) quality is achieved by personnel performing the activity; and 3) overall performance is reviewed and evaluated using an independent assessment process.

2.3 DEFINITIONS

- 1) Quality - The degree to which an item or process meets or exceeds the end user's requirements and expectations.
- 2) Quality Assurance - Those systematic actions that provide confidence that quality is achieved.
- 3) Quality Control - The system of activities whose purpose is to control the attributes of an item or process in accordance with specified requirements and standards of performance.
- 4) Graded Approach - A method that provides for the application of management controls commensurate with the level of present or potential hazards posed to human health or the environment should a release enter the environment.

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2.3 REQUIREMENTS

2.3.1 General

DOE-RL and its contractors will develop and implement QAPs that meet the requirements specified in this permit application. The QAPs will be applicable to 1) corrective action investigations, 2) design and construction of on-site TSD facilities, 3) waste analysis, 4) maintenance and operations of on-site TSD facilities and 5) closure/post closure of on-site disposal units. A graded approach will be used in developing and implementing QAPs. For example, the controls applicable to design and construction of a facility where the potential hazards to human health or the environment should a release occur are minimal shall be commensurate with those applicable to similar industrial applications. Where the potential hazards are substantial, controls that mitigate the probability of a release are increased.

2.3.2 DOE-RL (PERMIT HOLDER)

DOE-RL will develop and implement a QAP for the quality affecting activities performed by DOE-RL personnel. As a minimum, the QAP will address program, procurement, and assessment.

2.3.2.1

The program will incorporate the following minimum requirements:

- o A quality assurance policy statement will be issued by the RL Manager which commits the organization to implement a formal QAP
- o Top management will retain and exercise the responsibility for the scope and implementation of an effective QAP. Line management will be responsible for the achievement of quality. Each individual will be responsible for the quality of work.
- o The QAP will be binding on personnel, including those having responsibility for planning and scheduling. Management will take the necessary actions to ensure that the QAP is understood and implemented.
- o The quality of items and processes will be ensured to an extent consistent with their risk using a graded approach.
- o The QAP will describe organizational structure, functional responsibilities, levels of authority, and interfaces.
- o Readiness reviews will be performed prior to major scheduled or planned activities.

- o Responsibility and authority to stop unsatisfactory work will be assigned such that planning and schedule considerations do not override safety considerations.

2.3.2.2

The procurement section will incorporate the following minimum requirements:

- o Applicable technical and administrative requirements will be invoked on contractors, including the applicable requirements invoked by the RCRA permit.
- o An evaluation will be performed to ensure that only qualified contractors are selected.
- o Periodic assessments will be conducted to verify the quality of the contractor's work.
- o Review of contractor's QAPs.

2.3.2.3

The assessment section of the QAP will incorporate the following minimum requirements:

- o Planned and periodic independent assessments will be established and implemented. The assessments will verify compliance to the requirements contained in the permit. Additionally, the assessments will consider the achievement of quality and the improvement of items and processes.
- o Personnel performing independent assessments will monitor work performance, identify abnormal performance and precursors of potential problems, identify opportunities for improvement, identify areas where permit modifications may be appropriate, report results to a level of management having the authority to effect corrective action, and verify satisfactory resolution of problems.
- o Personnel performing independent assessments will be technically knowledgeable and focus on improving the quality of the processes that lead to the end product. They will also assess areas such as contingency and emergency planning, training, etc.
- o Scheduling of assessments and allocation of resources will be based on the status of and risk associated with the item or process being assessed.

2.3.2 DOE-RL CONTRACTORS (OPERATORS)

DOE-RL will require its contractors to develop and implement QAPs appropriate (graded approach) for the quality affecting work they are contractually responsible for performing. The scope of the QAPs will include 1) corrective action investigations, 2) design and construction of on-site TSD facilities, 3) waste analysis, 4) maintenance and operations of on-site TSD facilities, and 5) closure/post closure of on-site disposal units. Unit specific permit applications will define the specific applicable work, the grading applied to the work, and the specific QA/QC requirements applicable to the work or each major phase of the work. DOE-RL contractors' QAPs will be written to meet the requirements of the current revision of DOE Order 5700.6 and section 6.5 of the Hanford Federal Facility Agreement and Consent Order.

3.0 Training Plan

3.1 Issue

What constitutes appropriate training plan documentation for the Hanford Site Facility?

3.2 Resolution

The regulatory basis for dangerous waste training requirements is outlined in Washington Administrative Code (WAC) 173-303-330. To satisfy these requirements, Hanford will provide an "umbrella" training plan that will include a description of the four dangerous waste worker categories into which all employees may be classified. A written description of the type and amount of both initial and continuing training required by dangerous waste workers and a description of the systems used to document the completion of training will also be included.

Each Waste Management Unit permit will also have available a "sub-tier" training plan which will provide specific information regarding dangerous waste management positions. Included in these will be specific job descriptions and titles.

In addition, some training required of contractor personnel is mandated by separate Occupational Safety and Health Administration (OSHA) and DOE guidelines, but has been intertwined with Hanford Site dangerous waste worker training programs. This type of training includes radiation worker safety, mixed waste, and OSHA hazardous waste site worker training. These types of training courses will not be included in the Hanford Site Facility Permit as they are supplemental to information required by WAC-173-303-330 and are monitored for compliance by other government agencies.

Training plan information will be included in Chapter 8.0 of the Hanford Site Facility Permit application.

4.0 Dangerous Waste Verification (Onsite)

4.1 Issue

Is an analytical program required to verify the constituents of waste, or the contents of dangerous waste containers, moved within the Hanford Site Facility?

4.2 Resolution

A *Hanford Site Facility Waste Analysis Plan* will be prepared in accordance with RCRA and WAC regulations. The plan will define the requirements for wastes moved onsite and for wastes received for management from offsite generators. The offsite requirements for nonradioactive dangerous waste will comply fully with the WAC-303 regulatory stipulations for facilities receiving waste from offsite generators. The onsite waste movement requirements will also be compliant with regulatory stipulations for onsite waste movement. Wastes being shipped offsite for treatment, storage, and/or disposal will not be included in an onsite verification program, since these wastes will be verified prior to shipment offsite (using TSD required profiles). The program for wastes to be managed onsite will use the current Hanford program as their basis. Additional Quality Assurance/Quality Control requirements will be imposed in the plan to assure that waste generating operations properly characterize, designate, package, and otherwise manage, wastes from those operations. These QA/QC requirements will include some level of physical or chemical verification for wastes generated and managed onsite. For a given waste container, it is anticipated that verification would be performed only once (assuming positive verification). The waste container would be sealed or otherwise marked to make it clear that it had been verified. For liquid wastes moved onsite in bulk, either by tankers or pipeline, waste analysis and verification testing will be conducted per the receiving unit's waste analysis plan.

The goal of RCRA and WAC 173-303 is to assure that hazardous/dangerous wastes are properly managed. Thus the Hanford program must encourage proper waste management (i.e., require waste analyses adequate to assure proper designation, appropriate and reliable packaging, safe and secure storage, and proper treatment and disposal). A facility waste analysis plan will help meet this goal, and will also enhance the continuity of unit specific waste analysis plans.

The facility waste analysis plan will be approached in two phases:

- Phase I - Develop and get consensus on an overall waste analysis plan, including the waste verification strategy. This will include contractor development and review, DOE review, and Ecology and EPA review. The plan should include an implementation strategy and schedule that defines the

actions needed to implement this plan and the timetable for doing so.

- Phase II - Implement the conceptual plan. This includes establishment of the organization to do the QA reviews and developing or upgrading procedures for the Hanford Facility and at each of the impacted waste management units. This would also include defining the procedures used to gather laboratory samples, or the extent of physical verification (e.g., X-raying for low-level waste).

The *Hanford Site Facility Waste Analysis Plan* will be addressed in Chapter 3.0 of the Hanford Site Facility Permit Application. Because of the complexity of this plan, the initial submittal of Chapter 3.0 may only include an implementation strategy and schedule. The completed plan would be submitted in accordance with this implementation schedule and be included in a future modification of the Hanford Facility Permit.

5.0 Soil and Groundwater Background Determination and Clean-Up Standards

1.1 Issue

What is the appropriate method for determining background at the Hanford Site Facility?

1.2 Resolution

The requirements to determine background threshold levels and clean-up standards are based on the Washington Administrative Code (WAC) 173-303-610, "Closure and Postclosure." Due to the similarity of the geologic makeup of the Hanford Site, the probability exists that background levels can be established on a Site-wide basis. The approach to establish background values is to conduct a systematic sampling and analysis program which will obtain enough data to statistically verify background values.

Also, in a related issue, Ecology is proposing to integrate closure performance standards with health and environmental protection based levels. The determination of health based levels will be based on the formulas and guidance contained in the Model Toxic Control Act (MTCA), Washington Administrative Code, WAC 173-340 which became effective on February 28, 1991.

This information of background threshold values and closure performance standards will be included in Chapter 11.0 of the Hanford Site Facility Permit application.

6.0 Groundwater Monitoring/Vadose Zone Well Construction Requirements

6.1 Issue

What is required to meet interim or final status groundwater monitoring/vadose zone well construction requirements at the Hanford Site Facility?

6.2 Resolution

Construction of groundwater monitoring wells will be conducted in accordance with milestones established in the Tri-Party Agreement. This milestone calls for the installation of RCRA compliant monitoring wells at the rate of 50/year until compliance is achieved. Groundwater monitoring conditions set forth in individual waste management unit permits will also be established as such permits are finalized.

Well construction/rehabilitation will be handled in accordance with a letter on this subject co-signed by Ecology and EPA, and transmitted to the DOE/Contractors in September 1990.

Purgewater will be handled in accordance with an ancillary agreement finalized among the DOE-RL/Contractors, Ecology, and EPA in August 1990.

The above groundwater information will be included in Chapter 5.0 of the Hanford Site Facility Permit Application. Also to be included in this permit application will be a map of RCRA-compliant wells and a description of Environmental Investigation Instructions (EIIs) covering groundwater monitoring activities. A current copy of the EIIs will be maintained on file at the Hanford Site Facility Record Repository.

The initial Hanford Site Facility Permit will not address vadose zone monitoring requirements. Future modifications of this permit may address this subject dependent upon the outcome of discussions with Ecology and EPA regarding the basis and objectives for a vadose zone monitoring plan. The need for such discussions was identified in letter transmitted from the DOE-RL/Contractors to Ecology and EPA in February 1990 (Witness to Stanley, February 1990, 90-ERD-31).

Groundwater monitoring and well construction requirements information will be included in Chapter 5.0 of the Hanford Site Facility Permit application.

7.0 Reporting Requirements

7.1 Issue

What constitutes the appropriate means to respond to reporting requirements for hazardous substances releases?

7.2 Resolution

The DOE/contractor has implemented the requirements of DOE Order 5000.3A. The Order addresses the requirements to report events that are categorized as "Off Normal Events;" "Unusual Occurrence;" or "Emergencies." Contractors have developed procedures to provide the mechanisms and systems to make required notifications to offsite agencies in accordance with DOE and WAC reporting requirements. DOE-RL submitted two letters to Ecology (Reference 1 and 2) which propose criteria for reporting of spills of dangerous waste, extremely hazardous waste, and acutely hazardous waste. An agreement relative to what is required to be reported (quantities and materials) to comply with the WAC requirements is stated in References 1, and 2. DOE and Contractors will report spills in accordance with WAC 173-303-145 and the referenced correspondence. Verbal notification will be provided to Ecology within 24 hours in the following instances (as stated in Reference 1):

1. Any release which requires notification to the National Response Center pursuant to 40 Code of Federal Regulations (CFR) 302.4;
2. Any release resulting in a discharge to the ground, groundwater, or surface water if (1) the materials was regulated as a dangerous waste prior to release and, (2) for wastes designated due to a characteristic or criterion, if the material exhibits the characteristic or criterion at the point of discharge to the environment;
3. Any release resulting in a discharge of dangerous waste to the ambient air will be reported if the release requires notification pursuant to 40 CFR 302.4 (See criterion 1). Additionally, DOE will notify the Benton-Franklin-Walla Walla Counties Air Pollution

Reference 1: DOE-RL to Ecology (R.A. Holten (DOE-RL) to R.F. Stanley (Ecology)), "Reporting of Hazardous Substance releases Pursuant to Washington Administrative Code 173-303-145," dated June 21, 1990.

Reference 2: DOE-RL to Ecology (R.A. Holten (DOE-RL) to T.L. Nord (Ecology)), "Reporting of Hazardous Substance Releases Pursuant to Washington Administrative Code 173-303-145," dated September 27, 1990.

Control Authority (BFWW) of any release which requires notification pursuant to the condition of Prevention of Significant Deterioration (PSD) permit number PSD-X80-14;

4. Any release which requires notification to the Department of Transportation pursuant to 49 CFR 171.15;
5. Any release which requires notification to the community emergency coordinator pursuant to 40 CFR 355.40;
6. Any oil release which requires notification to the National Response Center pursuant to 40 CFR 355.40;
7. Any release of a regulated substance from an underground storage tank requiring reporting pursuant to 40 CFR 280.3. These releases will be reported to Ecology's Central Region Office.

Modification to Criteria Number 2 above (modified by Reference 2):

2. Any release equal to or greater than the reportable quantity resulting in a discharge to the ground, ground water, or surface water if (1) the material was regulated as a dangerous waste prior to the release, and (2) for wastes designated due to a characteristic or criterion, if the material exhibits the characteristic or criterion at the point of discharge to the environment. Reportable quantities are 1 pound for Acutely Hazardous Waste, 10 pounds for Extremely Hazardous Waste, and 100 pounds for Dangerous Waste.

Revisions as a result of changes to DOE Emergency Preparedness requirements may also be made to reporting procedures, but will not be provided to Ecology for review because they are used to comply with other contractual requirements aside from the WAC.

Reporting will be conducted in accordance with a notification matrix developed between DOE-RL, the Washington State Department of Community Development, and the Oregon Department of Energy (as proposed in a draft dated January 2, 1991). In addition, plans are to provide 'Page 1s' of Occurrence Reports to the states of Washington and Oregon within 72 hours of their completion.

Reporting requirement information will be included in Chapter 6.0 of the Hanford Site Facility Permit Application.

8.0 Financial Responsibility/Liability

8.1 Issue

Under RCRA, should a government contractor who is designated as a "co-operator" to certain waste management units on a federal facility be responsible for the financial liability, assurances and cost estimates when the federal government who is the "owner" and "operator" of the facility itself is exempt from such requirements? An ancillary issue is how information regarding closure costs should be transmitted to Ecology.

8.2 Resolution

Neither the DOE nor the Contractor will be compelled to provide for the requirements set forth in WAC 173-303-620, however, Ecology reserves its rights to reopen this matter at a later time.

DOE-RL will use the general approach outlined in letter from T. L. Nord (Ecology) to S. H. Wisness (DOE-RL) dated 01-28-91. Cost estimates for closure and post closure activities will not be provided as a means to satisfy the financial assurance requirements of WAC 173-303. However, beginning 01-01-92, DOE-RL will provide an annual report on closure cost estimates for the waste management units covered in the Hanford Facility Permit.

Will get new one

9.0 Mixed Waste/Radionuclide Jurisdiction

9.1 Issue

Is Ecology outside the scope of its legal authority when attempting to control the radioactive components of mixed waste resulting from the DOE-RL Operations?

9.2 Resolution

The mixed waste/radionuclide jurisdiction issue has been discussed at a number of unit manager meetings with Ecology. During these discussions, Ecology has not agreed to a dual control of mixed waste whereby DOE retains jurisdiction of the radioactive components and Ecology retains control of the hazardous components of the mixed waste. DOE-RL will not relinquish its jurisdiction over source, special nuclear material, or by-product materials which are specifically exempted from the federal RCRA program because the control of these materials is governed by the Atomic Energy Act. Ecology will not recognize that since U.S. Congress has already acted in the area exempting specific radioactive materials, it is pre-empted by federal law from also regulating in that area. No resolution has been reached in this matter.

will get new rule

10.0 Protection of Information

10.1 Issue

Can DOE-RL deliver all the information requested by Ecology regarding the RCRA waste management units within the Hanford Site Facility to Ecology when Ecology refuses to provide for the non disclosure of any information. An ancillary issue is how to provide the RCRA information to Ecology.

10.2 Resolution

DOE-RL and its contractors will not disclose those documents which they are required by law, regulation or contract to keep secret, confidential or privileged.

Information which may be disclosed to Ecology only, will be marked with a legend. The legend will give an indication of to whom the information may be disclosed and why such information can not be disclosed to members of the public. Ecology will provide confidentiality for information clearly marked with a legend indicating the information is not available for public disclosure.

A description of applicable facility procedures will be included in the permit. The actual procedures will not be included in the permit but will be available at the waste management unit for inspection by Ecology. Further, information copies will be provided to an onsite Ecology inspector as expediently as possible when requested.

The DOE-RL and contractor will attempt to clear prospectively those documents that Ecology may be interested in reviewing. Where information is not cleared for release to the public, the DOE-RL and contractor will provide an expedited method for clearance.

DOE-RL may provide a public notice that information at Ecology may or may not reflect actual procurement packages as necessary.

*Will get new one
will use a longer version
feedback to Barbara*

11.0 Minor/Major Permit Modifications

11.1 Issue

What is the methodology by which minor/major permit modifications will be carried out?

11.2 Resolution

All Permit modifications shall be carried out in accordance with Washington Administrative Code 173-303-830 with the exception that class 1 changes shall be submitted to Ecology on an annual basis.

Sections of documents referenced in the Permit that are not subject to WAC requirements shall be excluded from permit modification requirements.

Permit modification information will be included in Chapter 1.0 of the Hanford Site Facility Permit application.

12.0 Identification of Solid Waste Management Units

12.1 Issue

What is a realistic approach for the identification and documentation of SWMUs on the Hanford Site?

12.2 Resolution

The proposed approach to satisfy the requirements for identification and update of SWMUs and their releases would use a combination of the following products:

o Hanford Waste Information Data System (WIDS)

The WIDS database currently identifies the universe of DOE waste units on the Hanford Site, which includes all DOE-RL SWMUs. Also included are non-SWMUs such as one-time spills, sanitary waste sites, and structures awaiting decontamination and decommissioning. A new field has been added designating if a waste unit is a SWMU. Effort is currently underway to add any additional SWMUs which have been identified recently, primarily through operable unit scoping studies. The WIDS contains the descriptive information required for each SWMU, to include known releases of hazardous wastes and constituents. The WIDS therefore would represent the official current listing of SWMUs on the Hanford Site. As new SWMUs are identified, they would be added to WIDS.

o Hanford Site Waste Management Units Report (HSWMUR)

The HSWMUR is updated annually in January, unless it is determined that an update is not necessary. The Report reflects summary information on each waste unit in the WIDS. The next update will be included as part of the submittal of the RCRA Permit Application, reflecting all known SWMUs on the Hanford Site at the time of permit issuance. As discussed above, notification of additional units would then be via the WIDS. The HSWMUR will include a set of the maps discussed below. Each annual update will reflect the newly identified SWMUs from the preceding year.

o Set of Hanford SWMU Topographical Maps

Current maps included in the HSWMUR identify all the waste units, but are not topographical in nature. Due to the size of the Hanford Site and projected number of SWMUs, creativity is necessary to develop a set of useful maps that meet the intent of the regulations. This should be tied to the mapping/GIS activities being conducted in support of the clean-up program. It is recommended that the existing non-topographic maps contained in the HSWMUR be used until an automated mapping system is in place to develop maps more in line with the regulatory requirements.

o Hanford Site RCRA Permit

The RCRA Permit will reference the above data base and report for SWMUs and known releases for the DOE-managed units. The permit would then have a separate section to list SWMUs of other responsible parties that are on DOE-owned land.

SWMU identification information will be included in Chapter 8.0 of the Hanford Site Facility Permit application.

13.0 Corrective Action Schedules of Compliance

13.1 Issue

How can the requirements for providing corrective action schedules of compliance as part of the RCRA Permit be satisfied, while achieving the RCRA/CERCLA integration called for in the Tri-Party agreement (TPA)?

13.2 Resolution

A section in the RCRA Permit on schedules of compliance for corrective actions, to include the following elements, will be provided:

- RCRA Facility Assessment (RFA)
- RCRA Facility Investigation/Corrective Measure Study (RFI/CMS)
- Corrective Measure Implementation (CMI)
- Interim Measure (IM)

In each of these elements a description of how the process is to be carried out, as described in the Tri-Party Agreement, will be provided. The plans to be developed will be defined and referenced to the Tri-Party Agreement work schedule for commitments in accomplishing the work.

Remedy selections, for either corrective or interim measures, will be incorporated into the permit via a major modification. A section will be included where such remedy selections will be listed and referenced to an permit attachment which will describe the agreed to remedy. The schedule of compliance for the selected measures will be provided as part of the Tri-Party Agreement.

Each time an RFI/CMS plan, CMI plan, or IM proposal is approved and issued, a Tri-Party Agreement change package will be prepared and approved by the parties to place selected key events contained in the plan on the Tri-Party Agreement work schedule as milestones. Submittal of the plans/proposals to the regulatory agencies would have already been placed on the work schedule as milestones at the time that the operable unit was scheduled for action or the IM was identified.

Corrective action information will be included in Chapter ***11.0 of the Hanford Site Facility Permit application.

Section II

14.0 Waste Container Labeling Requirements

14.1 Issue

What is the scope of containers that require labeling in a manner which adequately identifies major risks associated with the container contents?

14.2 Resolution

All containers shall be marked with the labeling system currently used for compliance with U.S. Department of Transportation (DOT) requirements. In addition to the DOT required labels, containers shall be marked in a manner which adequately identifies major risks associated with the container waste contents as follows:

<u>Risk Marking</u>	<u>Waste Code for Contents</u>
- "PERSISTENT"	-- WPO1, WPO2, WPO3
- "TOXIC"	-- WT01, WT02
- "CARCINOGENIC"	-- WC01, WC02

The risk marking requirements apply to all containers holding wastes regulated under Washington Administrative Code 173-303. Dangerous wastes in permitted or interim status storage units prior to implementation of the additional marking requirements are exempt until they are removed from the storage unit. If possible, the storage area holding these wastes shall be marked in the manner identified above.

Waste container labeling information will be included in Chapter 3.0 of the Hanford Site Facility Permit application.

will talk to Roger

15.0 Legal Description of Hanford Facility and Dangerous
Waste Management Unit Boundaries

15.1 Issue

What is required in the way of a legal description for the Hanford Site Facility and waste management units within this facility, particularly if such units are to be clean closed?

15.2 Resolution

The WAC 173-303-610 and WAC 173-303-806 requirements for including a legal description of the boundaries of dangerous waste sites will be satisfied in the following manner.

The current legal description of the Hanford Site will be included in the Hanford Site Facility permit with the exclusion of the following four areas: (1) land administered by the Bonneville Power Administration, (2) land leased to the Washington Public Power Supply System (WPPSS), (3) land owned or leased by Washington State, and (4) land north of the Columbia River.

A note will be made in the Hanford Site Facility Permit that WPPSS will receive their own TSD permit and, hence, will not be included in the Hanford Facility permit for corrective actions.

The Records of Survey that are used to define the legal boundaries of the waste management units will identify these boundaries with Washington State Lambert Coordinates based on the North American Datum of 1983. The Record of Survey will relate the boundaries to Township, Range, and Section by scaling on US Geological Survey topographic maps. The Records of Survey will be submitted to the local authority with jurisdiction over local land use, and to the Benton County Auditor if at closure dangerous waste is left in place.

Records of Survey for five waste management units will be included in Revision 0 of the Hanford Site Facility permit application. These waste management units include the (1) 616 Nonradioactive Dangerous Waste Storage Facility, (2) Simulated High-level Waste Slurry Treatment and Storage, (3) 300 Area Solvent Evaporator, (4) 183-H Solar Evaporation Basins, and (5) 2101-M Pond.

Legal Discription information will be included in Chapter 11.0 of the Hanford Site Facility Permit application.

16.0 Onsite Waste Transportation

16.1 Issue

Is the transportation of dangerous waste over publicly-accessible roadways within the Hanford Site Facility still considered to be on-site transportation?

16.2 Resolution

For purposes of RCRA, the Hanford Site is considered to be one facility. All dangerous waste activities within the Hanford Site Facility boundary are considered to be on-site, and not subject to off-site waste transportation requirements. An operating record will be maintained for all onsite waste movements. In addition, a means of documenting on-site waste transfers will be utilized and the associated records will be maintained as part of the operating records.

Onsite transportation information will be included in Chapter 3.0 of the Hanford Site Facility Permit application.

17.0 Facility Records

17.1 Issue

What is required to maintain Hanford Site Facility and waste management unit operating records?

17.2 Resolution

See attached proposal entitled *Data Systems Development for the Hanford Facility Records Repository*.

Facility records information will be included in Chapter 12.0 of the Hanford Site Facility Permit application.

will get from
Dennis Jordan

18.0 SECURITY OF HANFORD SITE FACILITY

18.1 Issue

Do the current security provisions at the Hanford Site meet the security requirements as set forth in WAC 173-303?

18.2 Resolution

The current security provisions at the Hanford Site Facility meet the security requirement as set forth in WAC 173-303.

The entire Hanford Site operational area is a controlled access facility and is expected to remain so for the foreseeable future. The Hanford Site maintains around-the-clock surveillance for the protection of government property, classified information, and special nuclear materials. The Hanford Patrol maintains a continuous presence of armed guards to provide Hanford Site security.

*Manned barricades are maintained around the clock at checkpoints on vehicular
*access roads leading to the Hanford Site. Access to the active portions is
*gained through manned barricades. All personnel entering or leaving the active
*areas must display a U.S. Department of Energy-issued security identification badge indicating authorization to enter the area and submit to a search of personal items carried into and out of the area. Additional entrance procedures must be followed to enter designated radiation zones. The active areas are completely surrounded by security fencing. The only openings in the security fences are barricaded and manned by armed guards on a 24-hour basis. The security fences are 8-foot-high chain link and are topped with three strands of barbed wire.

Each active area containing dangerous waste is posted with a sign, in English, reading, "DANGER-UNAUTHORIZED PERSONS KEEP OUT," in red and black letters on a white background. The signs are visible from all angles of approach, and are legible from a distance of at least 25 feet. In addition to these signs, the fences around the secured areas are posted with signs warning against unauthorized entry. The signs are visible from all angles of approach.

Facility security information will be included in Chapter 6.0 of the Hanford Site Facility Permit application.

*Needs more work
may have to be X'd until
confirmation.*

19.0 Marking of Transfer Piping

19.1 Issue

Should signs be posted at least every 50 feet along the length of any pipe carrying dangerous or mixed waste?

19.2 Resolution

Mixed waste signs will be posted at locations where an underground pipeline leaves a specified unit, where it crosses a road, where it 'bends,' and where it enters another unit. The need for mixed waste signs within the boundaries of a TSD unit will be determined on a unit-specific basis.

Information on the type of mixed waste sign, an implementation schedule for sign placement, and the status of underground piping maps will be included in Chapter 2.0 of the Hanford Site Facility Permit Application.

Marking of transfer piping information will be included in Chapter 6.0 of the Hanford Site Facility Permit application.

20.0 Inclusion of Air Permits in RCRA Permits

20.1 Issue

What is the desirability of including Clean Air Act related permits, notifications, and approvals in the Hanford Site Facility Permit?

20.2 Resolution

Clean Air Act related permits, notifications, and approvals will continue to be developed as stand-alone documents.

The addressing of new RCRA air regulations will be "picked-up" in Notice-of-Deficiency (NOD) cycles for RCRA permit applications to be submitted to meet June 1991 Tri-Party Agreement milestones (i.e., Double-Shell Tank System, 242-A Evaporator, Liquid Effluent Retention Basins). This approach will ensure that the milestone submittal date for these units does not have to be delayed.

Further clarification will be provided by Ecology, the Washington State Department of Health and EPA as to the relationship between Clean Air Act related permits, notifications, and approvals generated pursuant to PSD, NESHAP, RAEP or other Clean Air Act related programs and the RCRA permit.

Clarification of the relationship of Clean Air Act related notifications, approvals, and permitting to RCRA permitting is not necessary to proceed with the initial Hanford Site Facility Permit. However, clarification efforts will continue outside the context of the development of this permit.

Air permit information will not be included in the Hanford Site Facility Permit application.

22.0 Permitting Schedule For Construction of New TSD Units

22.1 Issue

Will an 'expedited' permitting approach, compatible with DOE's planning, funding, design, and construction approach, be used for the permitting of new TSD Units?

22.2 Resolution

A recent Tri-Party Agreement Change Request, if granted, will result in a delay of the start of construction of the Hanford Waste Vitrification Plant (HWVP) by two years. In addition, development of detailed design will likely be delayed and not all design information required for permitting will be available until after the newly established start-of-construction date for the HWVP is passed. In order to mitigate further construction delays, an 'expedited' permitting approach will need to be pursued for this unit. Such an approach should enable construction to proceed while certain design information is still being generated.

Other new TSD units at the Hanford Site will proceed under the planning, funding, design, and construction approach established by DOE Orders. Similar to HWVP, not all design information required for permitting will be available when construction of these units could be commenced. Hence, the 'expedited' permitting approach established for HWVP, could be applied to other new TSD units to ensure undue construction delays are not experienced.

Establishment of an 'expedited' RCRA permitting approach is not necessary to proceed with the initial Hanford Site Facility Permit. However, efforts to establish such an approach will continue outside the context of the development of this permit.

New TSD permitting information will not be included in the Hanford Site Facility Permit application.

23.0 Waste Minimization Plan

23.1 Issue

What constitutes appropriate waste minimization plan documentation for the Hanford Site Facility?

23.2 Resolution

The WAC 173-303 requirements for waste minimization plans are satisfied in the *Hanford Site Waste Minimization and Pollution Prevention Awareness Plan* (including Process Waste Assessment information) and the unit-specific waste minimization plans for each individual waste management unit. These plans will be included in the formal submittal of the *Hanford Site Facility Permit Application* (Facility permit application) (both at the facility and waste management unit level). The DOE-RL plan will have overall control if inconsistencies between plans are noted. In addition, as a requirement of the Permit, the *RCRA (HSWA) Biennial Waste Minimization Report* and the *DOE-HQ Waste Reduction Report* which provide a status on waste reduction activities at Hanford will be submitted to Ecology.

Because the cited waste minimization plan documents also serve to satisfy a broad range of other requirements (e.g. DOE Orders), revisions made to portions of these documents that are not governed by the requirements of WAC 173-303 will not be considered as a permit modification subject to review or approval by Ecology. Those portions of the waste minimization plan documents that do address the requirements of WAC 173-303 will be identified in the Facility permit application.

Waste minimization information will be included in Chapter 10.0 of the Hanford Site Facility Permit application.

24.0 Independent Registered Professional Engineer Certification

24.1 Issue

Can a DOE contractor perform independent registered professional engineer certification?

24.2 Resolution

Certification by a registered professional engineer is required to support RCRA permitting activities at the Hanford Site Facility (e.g., tank integrity assessments, closure). Such certification, where required, will be conducted using a DOE contractor or subcontractor that has not been responsible for the design, construction, operation, and/or closure of the particular TSD unit. Contractor/subcontractor engineers conducting certification will be registered within Washington State or within a state having a reciprocal agreement with Washington State.

Independent engineer information will be included in Chapter *****13.0 of the Hanford Site Facility Permit application.

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